Amendments to the Abstract

Please add the following abstract on a separate sheet:

Abstract

Reagents and a Method for Saturation Labelling of Proteins

A matched set of fluorescent dyes is provided, wherein each dye of the set is capable of covalent attachment to a protein and wherein each of the dyes has a molecular structure and a charge that is matched one with the other, such that relative electrophoretic mobility of a protein labelled with one dye of the set is the same as the electrophoretic mobility of the protein labelled with a different dye of the set. The matched set comprises at least two different fluorescent dyes of formula:

wherein n is 1, 2, or 3; Z^1 and Z^2 independently represent the carbon atoms necessary to complete a phenyl or naphthyl ring system; one of groups R^1 and R^2 is a target bonding group; remaining group R^1 or R^2 is selected from $-(CH_2)_4-W$ or $-(CH_2)_r-H$; group R^3 is hydrogen, except when either R^1 or R^2 is $-(CH_2)_r-H$, in which case R^3 is W; and W is selected from sulphonic acid and sulphonate. The invention also provides a method for saturation labelling of a protein with a fluorescent dye so as to label all available target amino acid, suitably cysteine, residues in the protein, thereby giving a single population of labelled protein molecules.